

**The *Concinella* group**, including members of the genus *Concinella* and primarily the type species *Concinella concinna* (Jones), can be used as an additional marker for correlation of the Late Capitanian (Late Severodvinian) interval of the Euramerican and Angarian realms (Pechora, Kuznetsk, and Tunguska basins and Taimyr).

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#### PALEOGEOGRAPHIC RESEARCHES OF LATE GLACIAL AND EARLY HOLOCENE IN THE NORTHWEST OF THE EAST EUROPEAN PLAIN

***Sokolova N.V., Kublitsky U.A., Leontev P.A., Grekov I.M., Brylkin V.V., Subetto D.A.***

*Herzen State Pedagogical University of Russia, St. Petersburg, Russia*

Nowadays the problem of changing natural conditions at the boundary of the Late Pleistocene and the Holocene is given special attention, because during this period of time the ice sheet was destroyed and the subsequent transformation of the environmental conditions from cold, arctic to warm and wet.

Within the Russian part of the north-west of the East European Plain, work is underway to reconstruct the natural conditions of the Late Pleistocene and Holocene transition: in the Kaliningrad Region [Druzhinina et al. 2015; Kublitskiy et al. 2014; Kublitskiy 2016], and Karelian isthmus [Andronikov et al. 2014; Kuznetsov, 2014; Subetto et al. 2016; Syrykh et al. 2017].

The purpose of the study is to reveal the synchronicity / asynchrony of the processes of lakes sedimentation and changes in natural conditions at the boundary of the Pleistocene and Holocene in the northwestern part of the East European Plain on the basis of generalizing and supplementing the paleogeographic data. It is planned to create a paleogeographic and paleoecological database for the objects of the northwest of the East European Plain (the Kaliningrad, Smolensk, Pskov, and Leningrad regions of the Russian Federation, as well as the territories of Lithuania, Latvia, Estonia and the Republic of Belarus), which has a qualitative geochronological link to the Late Pleistocene and Holocene to monitor the conditions of the lake systems and the dynamics of their changes in the past. This approach is actively developing in Russia [Grekov et al. 2014; Grekov, Subetto, 2015; Grekov et al. 2018]. After summarizing and analyzing the available information, it is planned to identify key areas, information on which is not sufficient to perform paleogeographic reconstruction.

As a result of the project implementation, a general paleogeographic reconstruction for the claimed time interval will be built on the basis of lithological, geochemical, palynological, chironomid, geochronological analyzes and LOI of the selected objects bottom sediments in the northwest of the East European Plain.

On the basis of the reconstruction, a synchronous / asynchronous scheme of the processes of lake sedimentation and development of the environment in the northwestern part of the East European Plain at the boundary of the Pleistocene and Holocene will be compiled using the geoinformation method.

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#### MINERALOGY AND CRYSTAL CHEMISTRY OF AUTHIGENIC CARBONATES FROM CALCITE-DOLOMITE SERIES OF SHALLOW LAKES SEDIMENTS (BAIKAL REGION)

*Solotchina E.P.<sup>1</sup>, Solotchin P.A.<sup>1</sup>, Sklyarov E.V.<sup>2</sup>, Danilenko I.V.<sup>1</sup>*

<sup>1</sup>*V.S. Sobolev Institute of Geology and Mineralogy, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia*

<sup>2</sup>*Institute of the Earth's Crust, Siberian Branch of the Russian Academy of Sciences, Irkutsk, Russia*

The high degree of influence of regional natural and climatic factors on sedimentation in intracontinental reservoirs requires a comprehensive study of their bottom sediments. The important information is contained in the mineralogical and crystallochemical characteristics of authigenic mineral phases, since the composition and structure of the precipitating minerals are directly dependent on